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## ASSOCIATIONS BETWEEN INTIMATE PARTNER VIOLENCE VICTIMIZATION AND EMPLOYMENT OUTCOMES AMONG MALE AND FEMALE POST-9/11 VETERANS

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I am submitting herewith a thesis written by Rachel Miriam Maskin entitled "ASSOCIATIONS BETWEEN INTIMATE PARTNER VIOLENCE VICTIMIZATION AND EMPLOYMENT OUTCOMES AMONG MALE AND FEMALE POST-9/11 VETERANS." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

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**ASSOCIATIONS BETWEEN INTIMATE PARTNER  
VIOLENCE VICTIMIZATION AND EMPLOYMENT  
OUTCOMES AMONG MALE AND FEMALE  
POST-9/11 VETERANS**

A Thesis Presented for the  
Master of Arts  
Degree  
The University of Tennessee, Knoxville

Rachel Miriam Maskin  
May 2019

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## ABSTRACT

**Objective:** Given high rates of intimate partner violence (IPV) victimization among veterans, along with employment-related difficulties, a better understanding of IPV's implications for employment functioning is needed among post-9/11 veterans, especially male veterans. This study aimed to examine the gender-based associations between IPV victimization types (physical, psychological, and sexual) and employment outcomes (absenteeism, presenteeism, and job satisfaction).

**Method:** A national sample of male and female post-9/11 veterans completed a survey administered approximately 5.5 years after deployment including IPV victimization and employment measures. This study used data from 407 veterans (52% women) in intimate relationships to examine the associations between IPV victimization and employment outcomes by gender, using regression-based analyses.

**Results:** Sexual IPV was significantly associated with absenteeism and presenteeism for women but not men, and physical IPV was significantly associated with presenteeism for men but not women. There were also marginal associations between psychological IPV and both absenteeism and job satisfaction overall, regardless of gender.

**Conclusion:** All IPV types were linked to employment functioning for both male and female post-9/11 veterans. These findings can aid in the development of trauma-informed psychosocial intervention efforts for women and men that target employment functioning as well as IPV to help victims of partner violence achieve healthy and stable lifestyles.

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# CHAPTER ONE

## INTRODUCTION AND GENERAL INFORMATION

Intimate partner violence (IPV), including psychological, physical, and sexual aggression from a past or current intimate partner, is a significant public health problem in the United States (Breiding, Basile, Smith, Black, & Mahendra, 2015). The National Intimate Partner and Sexual Violence Survey (2010-2012) reported that approximately 29% of women and 10% of men have experienced rape, physical violence, and/or stalking by an intimate partner, with at least one health-related impact associated with these or other IPV experiences within the relationship (e.g., injury, need for services, etc.; Black et al., 2011). Particularly common forms of IPV include psychological aggression (e.g., threats of violence; coercive control of finances, transportation, etc.; humiliation), physical violence (e.g., punching, hitting, kicking, throwing, grabbing, shaking), and sexual violence (e.g., rape, coercive sexual activities, and unwanted sexual contact or experiences). In turn, acute and chronic physical and mental health effects of IPV are well documented, ranging from symptoms of chronic pain to posttraumatic stress disorder (PTSD; Campbell, 2002). However, less is known about the impact of such experiences on more functional domains, such as occupational functioning.

Work-related outcomes are understudied in the IPV literature, particularly for men. Yet employment often serves as a target of IPV: abusers may restrict their partners' ability to obtain and maintain work. However, work also represents a potential means of independence for individuals in abusive relationships. For these reasons, it is a particularly important aspect of IPV victimization to consider. There are many ways in which IPV may undermine occupational outcomes. A controlling partner can impede the survivor's ability to get to work by a number of means, including limiting financial and transportation options, using physical restraint, and causing distress that interferes with the ability to function effectively in the workplace (Rayner-Thomas, Dixon, Fanslow, & Tse, 2016; Shepard & Pence, 1988). Shepard and Pence (1988) found that 55% of participants attending a support group for battered women had been absent from work because of their abuse, and 62% had either been late for work or left early. In addition, physical and emotional consequences of violence (such as exhaustion, impaired mobility, and inability to concentrate) may diminish an individual's ability to perform in the workplace. Along with tardiness, physical and emotional impairments have been described as primary contributors to decreased workplace functioning (Rayner-Thomas et al., 2016). In a series of qualitative interviews with women affected by IPV, this appeared most often in the form of fear, shame, and guilt in the workplace (Alsaker, Moen, Baste, & Morken, 2016). Furthermore, many survivors of IPV report that their abusers actually show up to their place of employment and harass them in the workplace

(Tiesman, Gurka, Konda, Coben, & Amandus, 2012). As a result, survivors' productivity may suffer (Swanberg, Logan, & Macke, 2005). Due to the combined effect of these IPV-related impacts, maintenance of employment over an extended period of time is one of the chief challenges cited by survivors of IPV. Crowne et al. (2011) found that women experiencing IPV were at greater risk for unstable employment both concurrently and 6 to 8 years following victimization. Other studies confirm that concurrent IPV jeopardizes employment stability (e.g., Swanberg & Logan, 2005; Tolman & Wang, 2005). This in turn creates a problem with general economic well-being for survivors: if they cannot sustain a job over time, it can be difficult to be financially independent from abusive partners (Moe & Bell, 2004). It is well-documented that recent IPV survivors have lower personal incomes, on average, than non-survivors (Meisel, Chandler, & Rienzi, 2003). Survivors of IPV who struggle with employment stability are also less likely to have access to such benefits as paid leave and healthcare, which are often offered only after an initial probationary period (Moe & Bell, 2004). These financial burdens are only exacerbated by the demands of providing for children. Ultimately, it seems that the association between IPV victimization and employment is cyclical, such that IPV experiences decrease individuals' capacity to perform well at work and maintain employment, which limits the individual's ability to leave an abusive relationship.

Although research shows important links between IPV and employment functioning, few studies have examined the nuances of that association. In order to design interventions and policy to combat negative employment outcomes, a range of populations must be considered. In particular, there should be a focus on men's experiences as well as women's. The scope of research on IPV victimization and employment outcomes for men is narrow: to our knowledge, only two studies have included men in their target populations (Rayner-Thomas et al., 2016; Wathen, MacGregor, & MacQuarrie, 2016). Although there is good reason for this, as women are more than twice as likely to be survivors of physical violence, sexual violence, and stalking as men, the fact remains that 1 in 10 men report having experienced IPV (Black et al., 2011). Yet, due to a number of factors, including social stigma around male victimization, much less is known about men's experiences of IPV victimization. Previous research has demonstrated some gender differences in both the frequencies and health impacts of different forms of IPV victimization (e.g., Black et al., 2011; Coker et al., 2002). For example, sexual IPV tends to be more commonly experienced by women than men (Black et al., 2011), and these forms of abuse and coercion are strongly associated with mental health symptoms, such as depression, for women IPV victims (e.g., Dichter et al., 2013). It is therefore important to understand whether such gender differences are observed with respect to work-related functioning. Indeed, a prior study found IPV victimization to be negatively associated with occupational functioning for men but not women (Iverson et al., 2017). As such, the current study targeted an important gap in the literature by

examining the role of gender in the associations between IPV types and a broad array of employment outcomes.

In addition, more attention to populations at high risk for IPV is warranted. Compared to their non-military peers, military members and veterans experience a higher incidence of IPV (Gerber, Iverson, Dichter, Klap, & Latta, 2014; Marshall, Panuzio, & Taft, 2005). According to Dichter et al. (2011), female veterans are 1.6 times more likely to experience IPV victimization than women who have not served in the military. Although the exact causes of elevated risk are not known, it is likely that stress specific to military service, including exposure to combat and violence, as well as reintegration stress following deployments to combat zones increases risk for IPV (e.g., Bradley, 2007; Klaw, Demers, & Da Silva, 2016). While these issues are particularly relevant to male and female veterans of the wars in Iraq and Afghanistan, there has been little research to date on IPV victimization among both male and female post-9/11 veterans, nor has there been much attention to the implications of IPV for work-related outcomes for veterans. A recent longitudinal study of post-9/11 male and female veterans found that military stressors, including sexual harassment, had important implications for occupational functioning and satisfaction in the years following military service (Smith et al., 2017). Further understanding of the effects of post-military IPV on work outcomes for male and female veterans is needed.

### **Current Study**

The current study sought to explore the associations between three common types of IPV victimization and key employment outcomes for both male and female post-9/11 veterans in order to inform interventions and policy to aid survivors in optimizing their work experiences. Prior work based on the larger study from which this project is based found that psychological aggression, but not physical or sexual aggression, was associated with general occupational impairment for male but not female veterans (Iverson, Vogt, Maskin, & Smith, 2017). Because the effects of IPV are heterogeneous and can be different depending on the type of IPV experienced (Dichter et al., in press), it is not only crucial to examine the impact of IPV as a whole, but also to isolate the consequences of exposure to specific types of IPV. We sought to extend these findings by examining the impact of these IPV types on additional facets of occupational quality of life—namely, absenteeism (i.e., time absent from work), presenteeism (i.e., ability to perform well in one's job, as measured by performance lost), and occupational satisfaction. Based on the literature to date, we hypothesized that greater frequency of each type of IPV victimization (psychological, physical, and sexual) would be associated with higher levels of absenteeism and presenteeism and lower job satisfaction for both genders. Furthermore, given aforementioned research with this cohort documenting differential impacts of IPV types on occupational functioning as a function of gender, we expected psychological IPV victimization to be associated with higher

levels of absenteeism and presenteeism for men in particular. Moreover, given prior research demonstrating the strong associations between sexual IPV and poorer health functioning for women, we expected sexual IPV victimization to be associated with higher levels of absenteeism and presenteeism for women in particular.

## CHAPTER TWO

### METHODS

#### Study Design and Participants

This study used data from a larger investigation of post-military employment and family outcomes among veterans of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Participants returned from deployment and separated from service approximately 5 years prior to the current data collection. A random sample of veterans stratified on deployment component (50% Active Duty, 50% National Guard/Reservist units) and gender (50% women, 50% men) were selected from the Department of Defense's (DoD) Defense Manpower Data Center (DMDC) records of all separating service members and invited to complete a mailed survey. A comprehensive overview of study procedures can be found in Vogt et al. (2013). Of the 813 participants who were sent the survey (73 non-deliverables, 2 deceased), 522 veterans (54% women) returned surveys (64.2% response rate). The subsample eligible for the current study was comprised of the 407 individuals who indicated that they had been in a romantic relationship within the last six months and thus completed the IPV measure. 73% of participants identified as white, 8% identified as Black, and 20% endorsed another racial/ethnic identity. 60% of the sample had at least a 4-year college degree. With respect to household income, 10% of the sample reported less than \$25,000, 44% reported between \$25,000 and \$75,000, and 46% reported over \$75,000.

#### Procedure

Data were collected using a modified Dillman survey mailing procedure (Dillman, Smyth, & Christian, 2009). For the initial mailing, participants were sent a packet with a cover letter explaining the purpose of the study and informed consent elements, an opt-out form, a survey, and a \$25 Visa gift card. A reminder/thank you card and a second copy of the survey were sent two weeks later to those who had not already responded or declined to participate. The same materials were sent two weeks later for a third mailing. The return of a completed survey implied participants' consent. This study was approved by the local Institutional Review Board.

## Measures

### ***Posttraumatic stress disorder***

We assessed posttraumatic stress disorder (PTSD) using the 20-item PTSD checklist (PCL-5; Weathers, Litz, Keane, Palmieri, Marx, & Schnurr, 2013). Responses were recorded on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely). Consistent with the most recent recommendations from the National Center for PTSD, all participants who had a score of at least 33 were identified as having probable PTSD. Coefficient  $\alpha$  in this study was .97.

### ***Depression***

We assessed depressive symptoms using an adapted version of the 7-item Beck Depression Inventory-Primary Care (Beck, Steer, Ball, Ciervo, & Kabat, 1997). This measure consisted of seven statements extracted from the original Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), with a variation on the response format: participants rated each item on a 5-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree). As in the BDI-PC, those who endorsed a 4 or greater on at least 4 of the 7 items were identified as having probable depression. Coefficient  $\alpha$  in this study was .91.

### ***IPV victimization***

We assessed IPV using the victimization scales from the Short Form Conflict Tactics Scale-Revised (CTS-2S; Straus & Douglas, 2004). The CTS-2S is a validated IPV screening instruments that assessed the frequency of respondents' exposure to aggression from an intimate partner. Three types of IPV were examined: physical assault (i.e., pushed, shoved or slapped, punched, kicked, beat up), psychological aggression (i.e., insulted, swore, shouted or yelled; destroyed something belonging to me or threatened to hit me), and sexual assault/coercion (i.e. physical force or insistence on having sex or unprotected sex). Participants rated items based on frequency of each aggressive act in the past 6 months (0 = *never*, 1 = *once*, 2 = *twice*, 3 = *3-5 times*, 4 = *6-10 times*, 5 = *11-20 times*, 6 = *more than 20 times*). Frequency scores were computed for each IPV type by summing the midpoints of each item in the subscale (e.g., 6 to 10 times was recoded as 8; see Straus, Hamby, Boney-McCoy, & Sugarman, 1996).

### ***Absenteeism***

We assessed the amount of time individuals had been absent from work over the past month relative to expected time spent at work using items from the absenteeism measure from the Health and Work Performance Questionnaire (HPQ; Kessler et al., 2003; Kessler & Merikangas, 2004). This measure has been found to be a valid assessment of the construct, as evidenced by its strong concordance with



employer payroll records across multiple occupations (Kessler et al., 2003). Participants indicated the number of hours they work in a typical 7-day week, the number of days missed over the last 4 weeks, and the total number of hours worked in the last 4 weeks. Consistent with scoring recommendations from the authors of the measure, we multiplied the number of hours typically worked in a week by four, subtracted the total number of hours actually worked to find an absolute measure of hours missed per month, and finally divided by the total number of expected hours at work per month.

### ***Presenteeism***

We used the presenteeism measure from the HPQ (Kessler & Merikangas, 2004) to assess individuals' perceptions of their own overall job performance relative to a top worker's job performance. Ultimately, total presenteeism represents the amount of job performance quality lost. Estimated test-retest reliability has been found to be 0.89 (Kessler et al., 2003), evidencing the stability of the construct. Respondents rated their own performance in their job over the past 4 weeks on a scale from 0 (worst job performance anyone could have at your job) to 10 (performance of a top worker). Consistent with scoring recommendations from the authors of the measure and Schuffham et al. (2014), we scored this measure by subtracting the individual's self-reported job performance from 10, dividing by 10, and converting to a percentage. This percentage allowed us to determine the ratio of individuals' performances to the performances of top workers at the same job.

### ***Occupational satisfaction***

We assessed participants' job satisfaction using the abridged 8-item Job in General scale (JIG; Russell et al., 2004), which was adapted from the original 18-item JIG (Ironson, Smith, Brannick, Gibson, & Paul, 1989). Significant associations between the AJIG scale and measures of related facets of job satisfaction, including affective commitment and organizational identification, evidence the scale's construct validity (Russell et al., 2004). Internal consistency reliability for this scale in the current study was 0.85. Participants rated the extent to which they agreed or disagreed with a series of adjectives regarding their job (e.g., "worthwhile") over the past 6 months on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The coefficient  $\alpha$  was .92.

## **Statistical Analyses**

Hierarchical multiple regression analyses were conducted to examine the effects of individual IPV types on each employment outcome. The three types of IPV victimization were tested in combined models, thus allowing for an examination of their relative associations with work-related outcomes. The first step of each regression included covariates that have been found to be associated with IPV victimization and IPV outcomes—race/ethnicity (white vs. non-white), income,

education (Adams, Tolman, Bybee, Sullivan, & Kennedy, 2013; Postmus, Plummer, McMahon, Murshid, & Kim, 2012; Rennison & Planty, 2003), PTSD (Black et al., 2011), and depression (Campbell, 2002). The second step of the regressions tested for the linear moderating effect of gender on the relationships between each type of IPV victimization and employment outcomes. Significant interaction effects were interpreted via simple slope tests of the moderators (Aiken & West, 1991). All data were analyzed using SPSS version 24.



## CHAPTER THREE

### RESULTS

The breakdown of IPV victimization and employment outcomes by gender is shown in Table 1. As previously found (Iverson et al., 2017), men reported more frequent physical IPV victimization, and women reported more frequent sexual IPV victimization. There were no gender differences in psychological IPV, absenteeism, presenteeism, or job satisfaction.

Table 2 presents the results of the multiple regressions we performed to examine associations between each type of IPV victimization and absenteeism, presenteeism, and occupational satisfaction, as well as gender differences in these associations.

We found significant associations between sexual IPV and absenteeism ( $B = .01$ ,  $p = .04$ ) and between physical IPV and presenteeism ( $B = .89$ ,  $p = .00$ ), both in the expected direction. These main effects were qualified by gender interactions. Specifically, a significant sexual IPV by gender interaction was observed for absenteeism, such that greater sexual IPV was associated with increased absenteeism for women but not for men (see Fig. 1). Significant IPV by gender interactions were also observed for presenteeism, such that greater physical IPV was associated with increased presenteeism for men but not for women (see Fig. 2), whereas greater sexual IPV was associated with increased presenteeism for women but not for men (see Fig. 3). We also found marginal associations between psychological IPV and both absenteeism ( $B = .06$ ,  $p = .06$ ) and job satisfaction ( $B = -.13$ ,  $p = .07$ ) overall, both in the expected direction.

## CHAPTER FOUR

### DISCUSSION

The literature on the associations between specific IPV types and employment outcomes is sparse, particularly among men and populations at high risk for IPV. We sought to address gaps in the literature by examining differential associations among three types of IPV (psychological, physical, and sexual) and three key indicators of employment functioning (absenteeism, presenteeism, and job satisfaction) within a national sample of male and female post-9/11 veterans readjusting to civilian life. To ensure that these individuals have the services that they need to reintegrate successfully, more information is needed about the implications of IPV victimization for work-related quality of life in the years following separation from service. Overall, we found evidence supporting that IPV victimization is associated with lower levels of job satisfaction and functioning, and that gender plays an important role in these associations.

The findings that men, but not women, experience higher levels of presenteeism in the wake of physical IPV victimization could be reflective of men's and women's differing use of available social support in the face of IPV. Although the literature on men's use of IPV workplace support following IPV is sparse, in general, studies have shown that men are less likely than women to seek external support for any type of problem they may experience (e.g., physical, emotional, financial; Addis & Mahalik, 2003; McKelley, 2007). This pattern may be particularly evident in the case of male IPV victimization as a greater degree of perceived stigma may raise fears of shame, humiliation, and/or concerns that they will not be believed following disclosure (Tsui, Cheung, & Leung, 2010). As such, men who experience IPV may be more reluctant to seek social support in the workplace environment. Consequently, they may not receive the same benefits of workplace support as women and be more vulnerable to employment-related effects of physical IPV. These findings suggest it may be fruitful to increase awareness of the negative impacts of physical IPV on men's work-related functioning to encourage support-seeking, which in turn may improve job performance.

In contrast, women reported increased absenteeism and presenteeism related to sexual IPV. This finding is consistent with existing literature on the performance of female victims of IPV in the workplace (e.g., Alsaker et al., 2016; McFarlane et al., 2000). Due to physical and emotional consequences of sexual IPV, survivors often find it difficult to get to work. Even if they are able to report to their workplaces, many survivors report that fear of repeated abuse and consequences of prior abuse are primary reasons for diminished ability to focus in the workplace. Furthermore, physical consequences of sexual IPV (e.g., injuries, sexual transmitted diseases, unintended pregnancy) may directly impact women's abilities to complete required tasks. Given literature suggesting sexual IPV to be strongly associated with mental health symptoms through shame and perceived helplessness, these findings suggest the potential utility of increasing survivors' access to needed supports,

including medical care and emotional support through employee assistance programs.

The finding that psychological IPV was marginally associated with lower rates of both absenteeism and job satisfaction, regardless of gender, is unsurprising. IPV victimization has been linked with poor mental health, physical health issues such as chronic pain and difficulty sleeping, and risky behaviors such as substance abuse (Black et al., 2011). Psychological IPV in particular has been linked with high rates of PTSD (Pico-Alfonso, 2005). Given this potent combination of possible effects, it stands to reason that psychological IPV would have a detrimental impact on survivors' general satisfaction, extending to the workplace in which residual distress may impair survivors' ability to carry out tasks or, indeed, show up at all.

These study findings should be considered in light of its limitations. Since there is almost no literature on this subject using male samples, we found it vitally important to consider male IPV victimization in our analyses. However, our analyses could have benefited from additional contextual information on the IPV dynamics, such as unidirectionality versus bidirectionality of violence, perpetrator gender, and simultaneous reporting of IPV experiences from both partners. This is an important consideration given the nature of the sample, as previous research has shown that bidirectional violence is prevalent among post-9/11 veterans in couples' therapy (Teten, Sherman, & Han, 2009). It is also important to remember that the timeframe for the IPV assessment was the past 6 months. This brief timeframe may contribute to the relatively low average frequencies of physical and sexual IPV observed in this sample. Additionally, the data available for this study did not allow for a wider range of gender, including transgender and nonbinary identities. As research indicates that rates of IPV are high among transgender individuals while available protections are lower (Yerke & DeFeo, 2016), future studies in this area should take identities beyond cis-male and cis-female into account. The study was also limited by its cross-sectional design, which limits our ability to assign causality to the associations between IPV types and employment outcomes. In terms of study variables, the short form of the CTS-2 (Straus & Douglas, 2004), which we used to measure psychological aggression, may be limited in its ability to capture psychological abuse and may capture some amount of normative partner conflict and relationship stress. Continued research should account for the clearly harmful effects of psychological victimization while also focusing assessments on less normative aspects of relationship dynamics. We also were not able to account for other potentially traumatic life events following deployment, which may have served as meaningful contextual factors. It is also likely that IPV would affect workplace functioning differently based on job-specific factors, including, but not limited to, type of labor and the nature of the work environment. Finally, we were not able to examine a full range of IPV types (e.g., stalking, coercive control), another important area for future research.

Despite these limitations, this study benefited from some noteworthy strengths. While some studies have examined the associations between IPV and work outcomes, very few have examined the role of gender in these associations. Further, the inclusion of multiple types of IPV victimization allowed for an

assessment of the relative work-related effects of these experiences. Additionally, the analysis of outcomes by IPV type opens the door to a more nuanced exploration of interventions for IPV victimization. The sample itself was also a central strength of the study, with its focus on veterans recently returned from Iraq and Afghanistan, as well as its oversampling of women to allow for gender comparisons. It is hoped that the current study will prompt additional research and clinical inquiry with both veterans and non-veteran samples.

Employment has been linked with positive outcomes for survivors of IPV not only in terms of financial independence (Rothman, Hathaway, Stidsen, & de Vries, 2007), but also across a number of additional domains. Many survivors view their employment as a space of both physical and emotional respite from violent home lives, as well as report finding a sense of purpose and self-esteem through their employment (Alsaker et al., 2016; Beecham, 2014; Rothman et al., 2007). Numerous studies have documented the positive effects of developing a social network within the workplace: social support reduces the sense of isolation survivors often experience, and coworkers may provide either emotional support or concrete resources for dealing with IPV (Alsaker et al., 2016; Staggs, Long, Mason, Krishnan, & Riger, 2007; Swanberg, Macke, & Logan, 2007; Yragui, Mankowski, Perrin, & Glass, 2012). However, our analyses indicate that IPV victimization is associated with poorer work performance, which may in turn jeopardize employment stability. Recent veterans are at particular risk for unemployment (Faberman & Foster, 2013), a fact which is likely to be compounded by IPV victimization and its attendant mental and physical health consequences. The current findings highlight work-related outcomes as yet another important health effect of IPV that needs to be part of the public health discussion regarding the importance of ending IPV.

Considering the current findings, places of employment may provide safe and non-stigmatizing opportunities to educate employees about IPV and its impact on health and work-related functioning. Given the substantial impacts of IPV for both men's and women's work-related functioning, employers may be particularly motivated to encourage prevention and intervention efforts for IPV. Awareness-raising campaigns and educational tools, including information regarding individual support for relationship conflict and IPV, could be integrated into employee orientation and ongoing training efforts. Additionally, employee assistance programs could train providers in identifying and addressing IPV. In addition to providing emotional support and tangible resource information, existing intervention models have included skills training and career counseling outside the workplace for female survivors of IPV (e.g., Chronister, Harley, Aranda, Barr, & Luginbuhl, 2012); future studies might extend these models to include male IPV survivors, as well as introducing interventions to provide structured support within the workplace. With this in mind, future studies should aim to design interventions to promote workplace accessibility and employment stability for those experiencing IPV.

In conclusion, this study lends further evidence that IPV victimization has significant consequences for both male and female post-9/11 veterans' employment functioning. Previous research has shown that negative employment outcomes can broadly impact survivors' well-being, and that employment itself can promote constructive growth within a violent relationship. Future work should examine these

processes in more detail, with particular attention to contextual factors for victimization by gender and psychological aggression, in order to better design interventions to ensure a stable and positive workplace environment for all.

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## APPENDICES

Table 1. Descriptive statistics and intercorrelations among study variables for men and women.

Variable	1	2	3	4	5	6
1. Physical IPV		.30*	.13**	.12	-.06	-.01
2. Psych IPV	.36*		.19*	.17*	.04	-.13**
3. Sexual IPV	.01	.03		.29*	.19*	-.09
4. Absenteeism	.08	.15**	-.05		.05	-.03
5. Presenteeism	.44*	.31*	-.08	.37*		-.47*
6. Job Satisfaction	-.06	-.24*	-.01	-.01	-.38*	
N	195/211	195/211	195/210	158/160	165/180	145/162
Minimum	.00/.00	.00/.00	.00/.00	-.38/-.75	.00/.00	8.00/8.00
Maximum	75.00/12.00	25.00/25.00	25.00/26.00	1.00/1.00	100.00/70.00	40.00/40.00
<i>M</i>	.92/.27	4.14/3.78	.30/.62	.09/.10	18.30/16.11	33.08/33.01
<i>SD</i>	5.86/1.16	6.29/6.19	2.18/3.38	.24/.29	15.80/14.04	6.45/7.17
<i>t</i>	1.58*	.59	-1.15*	-.19	1.36	.09
<i>Skew</i>	10.89/6.53	2.34/2.34	9.42/6.46	2.08/1.11	2.66/1.43	-1.43/-1.39
<i>Kurt</i>	133.99/53.86	5.03/5.01	96.32/42.75	4.50/2.94	11.37/2.69	2.60/1.82

Note: Upper section reflects intercorrelations for women, bottom section reflects intercorrelations for men. Slashes separate men (left) and women (right).

\* $p < .05$

\*\* $p < .10$

Table 2. Summary of hierarchical regression analyses for the associations of IPV variables and employment functioning controlling for race, education, and income level.

	B	SE	$\beta$	P-value	95% CI	
					Lower Bound	Upper Bound
<b>Absenteeism</b>						
Step 1	$R^2 = .11$					
Gender	.00	.03	-.01	.89	-.07	.06
Race	-.07	.04	-.09	.10	-.15	.01
Education	.00	.01	.02	.81	-.02	.03
Income	-.02	.01	-.16	.01*	-.04	-.01
PTSD	.11	.05	.16	.02*	.02	.21
Depression	-.02	.04	-.03	.69	-.09	.06
Physical IPV	.00	.01	.01	.89	-.02	.02
Psychological IPV	.01	.00	.12	.06 <sup>†</sup>	.00	.01
Sexual IPV	.01	.01	.12	.04*	.00	.03
Step 2	$\Delta R^2 = .02$					
Gender	.00	.03	-.01	.94	-.06	.06
Race	-.06	.04	-.09	.13	-.14	.02
Education	.00	.01	.00	1.00	-.03	.03
Income	-.02	.01	-.16	.01*	-.04	-.01
PTSD	.10	.05	.14	.05 <sup>†</sup>	.00	.20
Depression	-.02	.04	-.04	.61	-.09	.06
Physical IPV	.01	.03	.08	.67	-.04	.07
Psychological IPV	.01	.01	.18	.36	-.01	.03
Sexual IPV	-.04	.02	-.37	.06 <sup>†</sup>	-.08	.00
Gender x Physical IPV	-.01	.02	-.08	.67	-.05	.03
Gender x Psychological IPV	.00	.01	-.06	.76	-.01	.01
Gender x Sexual IPV	.03	.01	.52	.01*	.01	.06
<b>Presenteeism</b>						
Step 1	$R^2 = .18$					
Gender	-1.70	1.61	-.06	.29	-4.87	1.47
Race	.39	2.12	.01	.85	-3.78	4.56
Education	-1.06	.65	-.09	.11	-2.34	.23
Income	.02	.44	.00	.97	-.85	.89
PTSD	-.77	2.50	-.02	.76	-5.69	4.16
Depression	7.65	1.95	.25	.00*	3.82	11.48
Physical IPV	.89	.18	.27	.00*	.54	1.25
Psychological IPV	.12	.14	.05	.39	-.15	.39
Sexual IPV	.19	.33	.03	.57	-.47	.85
Step 2	$\Delta R^2 = .04$					
Gender	-2.33	1.61	-.08	.15	-5.50	.84
Race	.41	2.09	.01	.84	-3.70	4.52
Education	-1.21	.64	-.10	.06 <sup>†</sup>	-2.48	.06
Income	-.13	.44	-.02	.77	-.99	.73
PTSD	-.91	2.48	-.02	.72	-5.79	3.97
Depression	7.19	1.92	.23	.00*	3.42	10.96
Physical IPV	3.53	1.02	1.06	.00*	1.53	5.54

Table 2 (continued).

	B	SE	$\beta$	P-value	95% CI	
					Lower Bound	Upper Bound
Psychological IPV	.63	.43	.26	.14	-.22	1.47
Sexual IPV	-2.47	1.14	-.39	.03*	-4.71	-.24
Gender x Physical IPV	-2.63	.97	-.84	.01*	-4.53	-.73
Gender x Psychological IPV	-.29	.26	-.19	.27	-.81	.23
Gender x Sexual IPV	1.76	.68	.46	.01*	.42	3.10
<b>Job Satisfaction</b>						
Step 1	$R^2 = .16$					
Gender	.25	.77	.02	.75	-1.27	1.76
Race	1.10	1.04	.06	.29	-.95	3.14
Education	.41	.31	.08	.19	-.20	1.02
Income	-.04	.21	-.01	.87	-.45	.38
PTSD	-2.08	1.18	-.12	.08 <sup>†</sup>	-4.39	.24
Depression	-3.44	.93	-.25	.00*	-5.26	-1.62
Physical IPV	.15	.21	.04	.48	-.26	.56
Psychological IPV	-.13	.07	-.11	.07 <sup>†</sup>	-.27	.01
Sexual IPV	-.07	.20	-.02	.73	-.46	.32
Step 2	$\Delta R^2 = .01$					
Gender	.12	1.04	.01	.91	-1.92	2.16
Race	1.20	1.05	.06	.25	-.86	3.26
Education	.42	.31	.08	.18	-.20	1.04
Income	.00	.21	.00	1.00	-.42	.42
PTSD	-2.17	1.19	-.12	.07 <sup>†</sup>	-4.51	.17
Depression	-3.28	.94	-.24	.00*	-5.14	-1.43
Physical IPV	-.43	.70	-.12	.54	-1.81	.94
Psychological IPV	-.31	.24	-.27	.21	-.79	.17
Sexual IPV	1.39	3.51	.41	.69	-5.52	8.30
Gender x Physical IPV	.47	.52	.17	.37	-.56	1.49
Gender x Psychological IPV	.10	.14	.15	.47	-.18	.39
Gender x Sexual IPV	-.75	1.77	-.43	.67	-4.23	2.73

Note. IPV = intimate partner violence.

\* $p < .05$ .

<sup>†</sup>  $p < .10$ .

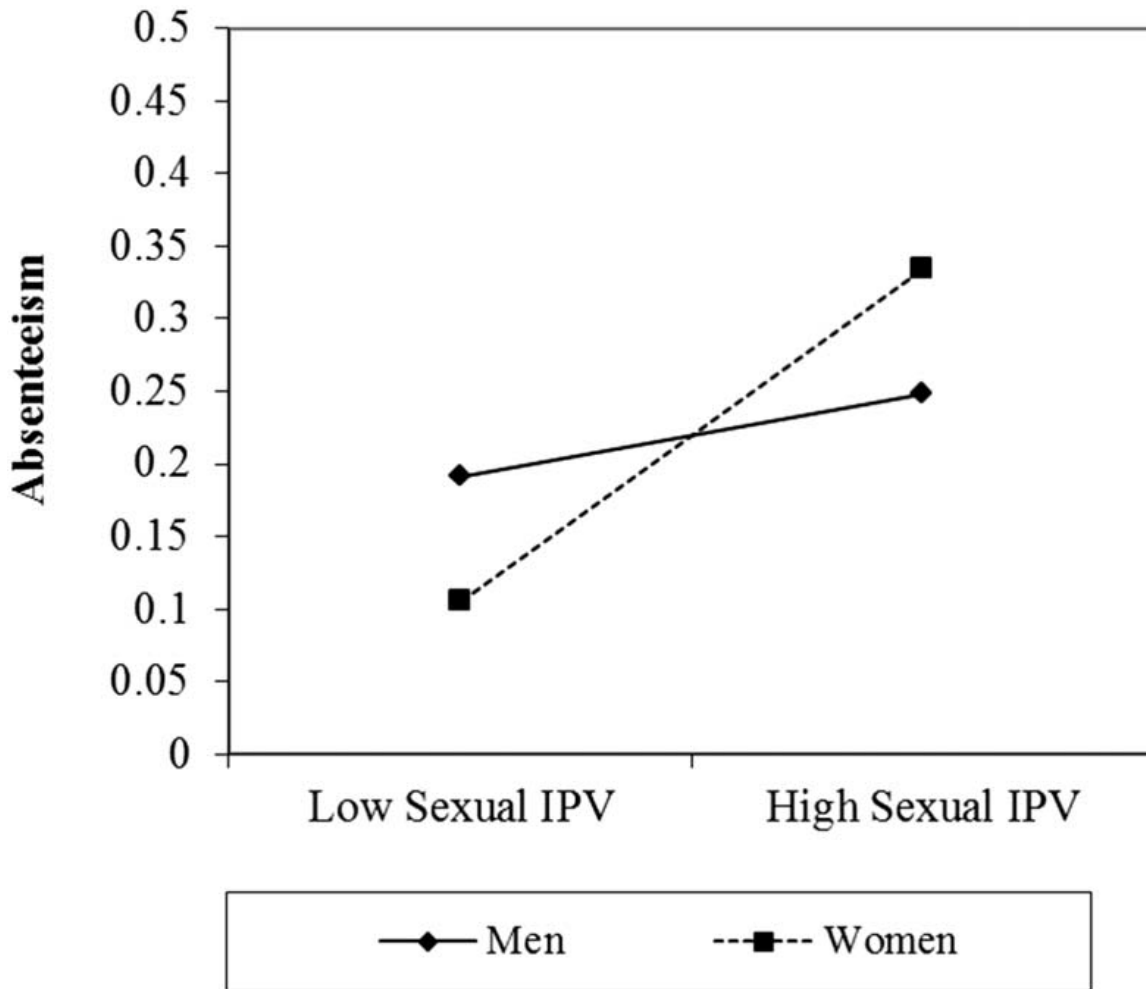


Figure 1. Interaction between gender and sexual IPV on absenteeism.



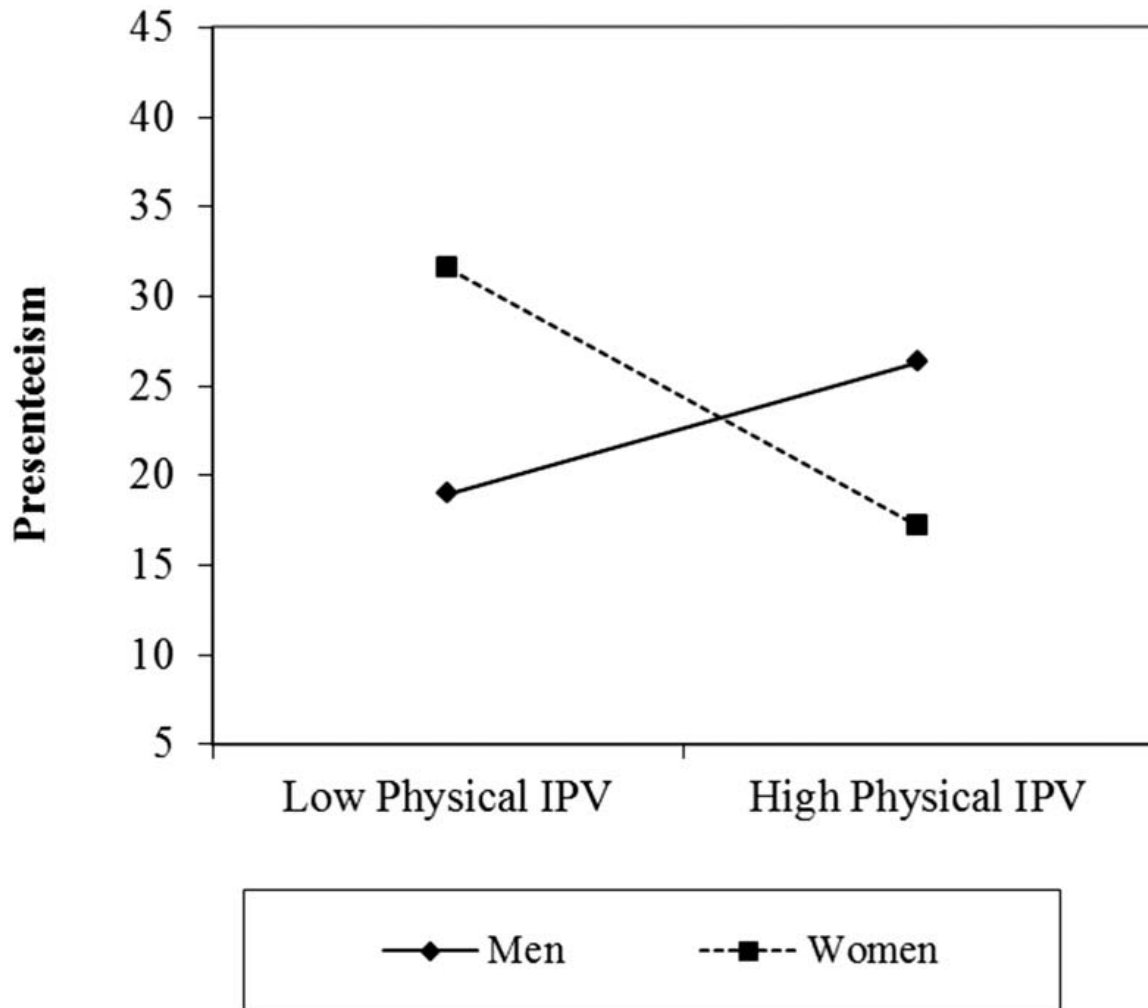


Figure 2. Interaction between gender and physical IPV on presenteeism.

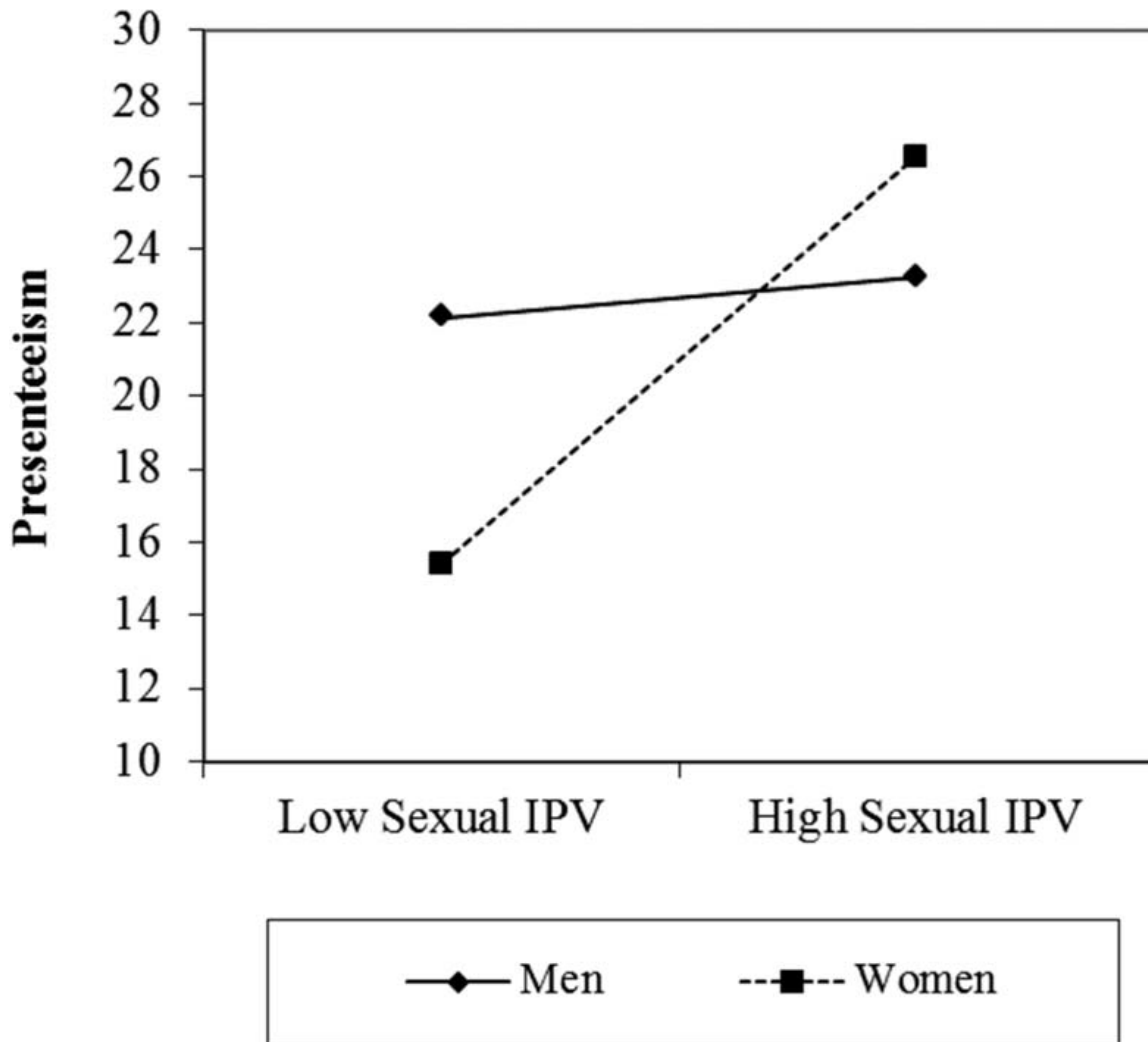


Figure 3. Interaction between gender and sexual IPV on presenteeism.

## VITA

Rachel Maskin, B.A. graduated from Mount Holyoke College in May 2015 with a degree in Psychology and English. Her research focused on mechanisms of romantic relationships, with a particular emphasis on attachment. Following her undergraduate tenure, she worked for three years at the Women's Health Sciences Division of the National Center for PTSD in Jamaica Plain, Massachusetts. She was involved in a longitudinal study of post-deployment outcomes in the domains of work and family for OEF/OIF veterans, as well as a screening implementation study for women veterans who experience intimate partner violence. At the University of Tennessee, Rachel is currently studying the ways in which climate and stress differentially impact the romantic relationships of LGBT college students.